

**What  
Is Your  
Share Of  
\$130 Billion?**



# ENERGY STAR® Buildings Can Help You Find Out.

## U.S. organizations can save \$130 billion by 2010

if they take advantage of available, low cost, energy-efficiency opportunities. Most businesses use energy inefficiently, which results in higher energy bills than necessary. Energy costs are not a fixed cost of doing business. They can be managed. Becoming more efficient is easy...with ENERGY STAR® Buildings.

## Let ENERGY STAR Buildings Be Your Energy Strategy

ENERGY STAR Buildings is a simple, profit-driven, and proven strategy that saves money. The energy to run a typical office building costs U.S. businesses \$1.50 per square foot. By partnering with the U.S. Environmental Protection Agency, you can reduce the energy cost for operating your buildings by 30 percent, while improving the comfort of your buildings and the productivity of your employees.

The comprehensive ENERGY STAR Buildings strategy takes advantage of the interactions among all of your building's systems, making them more efficient and making your business stronger. It has been adopted by hundreds of American businesses and has made a difference — even to those that thought they already had effective energy management plans.

## ENERGY STAR Buildings Makes Your Business Stronger

**Seize a sound investment.** The ENERGY STAR Buildings strategy is a profitable investment; it focuses on building-wide solutions with an internal rate of return of 20 percent or greater. In addition, it is very low risk. The returns are typically more immediate and predictable than most other corporate investments.

**Increase productivity.** Energy efficiency does not mean “conservation” or “sacrifice.” Using today's advanced technologies, ENERGY STAR Buildings partners have proven that you can save energy and provide a more comfortable and productive working environment for your customers and employees.

**Improve the environment.** Energy efficiency upgrades reduce your company's energy use. In turn, less air pollution is created because there are fewer emissions from producing energy. By making only those upgrades that are profitable, U.S. organizations can prevent the emission of billions of pounds of carbon dioxide — equivalent to eliminating the pollution generated by 20 million cars!

**Control your future.** As a result of the deregulation of the utility industry, it is increasingly important to understand how your buildings use energy. Becoming more energy efficient today will put you in the best possible position to negotiate your energy needs tomorrow.



## Achieve Outstanding Results With ENERGY STAR Buildings

ENERGY STAR Buildings will help you make smart investments in energy efficiency — no matter what business you are in, what size your company is, or how many buildings you have. ENERGY STAR Buildings provides the tools you need to plan, manage, and carry out an energy strategy that meets your company's needs.

Hundreds of organizations already using the ENERGY STAR Buildings strategy are experiencing impressive results. Here are a few examples:

	Annual Energy Savings	Annual Cost Savings
<b>City of Hope National Medical Center</b>	<b>22%</b>	<b>\$1.7 Million</b>
<b>Atlanta Journal &amp; Constitution (Cox Newspapers)</b>	<b>28%</b>	<b>\$900,000</b>
<b>Honeywell, Inc.</b>	<b>28%</b>	<b>\$3 Million</b>
<b>Mervyn's</b>	<b>10%</b>	<b>\$2.7 Million</b>
<b>Mobil Corporation</b>	<b>17%</b>	<b>\$1.7 Million</b>
<b>University of Missouri at Columbia</b>	<b>10%</b>	<b>\$1 Million</b>

*Note: These organizations have experienced internal rates of return of 20 percent on average.*

## Take Advantage Of A Proven Energy Strategy: Join ENERGY STAR Buildings

Join the ENERGY STAR Buildings partnership, and you will

- reduce the cost of energy to run your buildings by an average of 30 percent
- receive comprehensive technical and financial information that makes energy upgrades easy
- gain individualized technical assistance from an energy consultant during your upgrade process
- gain public recognition for demonstrating your environmental leadership
- reduce pollution and increase profits at the same time.

## Experience The Success

Let us help you determine how much of the \$130 billion your company can add to its bottom line. We are convinced that you will see the benefits of performing upgrades using the ENERGY STAR Buildings strategy.

To learn more about ENERGY STAR Buildings or how to become a partner, call the toll-free ENERGY STAR Hotline at 1-888-STAR-YES (1-888-782-7937).





# What is the ENERGY STAR® Buildings Strategy?

EPA has identified a proven strategy to increase the efficiency of buildings. This strategy has been successfully demonstrated through research, pilot projects, and working with thousands of organizations in all sectors of the U.S. since 1991. The strategy has three key elements: 1) planning and benchmarking; 2) using an integrated, five-stage approach to building upgrades; and 3) communicating success. Although these activities are interdependent, each plays a critical role in ensuring your success.

## Planning and Benchmarking

Managing and operating your facilities as efficiently as possible requires the involvement of a variety of people within your organization. ENERGY STAR® Buildings provides a roadmap that gets the right people involved, establishes benchmarks, and empowers your employees. It provides focus and guidance so that your energy investments will be a success. For hundreds of organizations, it is providing a banner under which managers can prioritize, organize, and successfully implement energy-efficient investments that save money and prevent pollution.

## Using an Integrated Approach to Building Upgrades

Most commercial buildings in this country use energy inefficiently. They use equipment that is either inefficient or just the wrong size. Buildings may also not be properly maintained or may have older, less efficient equipment. The result is wasted energy and, consequently, higher energy bills. But that is not all; these inefficient buildings don't provide the best working conditions for the people that occupy them. Workers are often less productive and customers are often not as comfortable. Maximizing a building's efficiency can decrease your operating costs and improve comfort at the same time.

There are proven ways to accomplish this. The experience of ENERGY STAR Buildings partners has shown that *how* you perform the upgrades is as important as *which* upgrades you implement. ENERGY STAR Buildings recommends an upgrade process that includes five stages which reduce costs and maximize the rate of return on your investments in energy efficiency. The five-stage approach is a process of considering and implementing upgrades in a specific, progressive, logical sequence. It is based on the interaction of building systems.

*“This voluntary partnership has helped us formulate an energy management plan that is resulting in \$77 million in annual savings world-wide.”*

— Fred Schoeneborn  
Global Facilities and Energy  
Management Coordinator  
Mobil Corporation



When you plan your upgrades in the recommended order, upgrades conducted in the beginning of the process often simplify the choices and reduce the cost of upgrades conducted later. Following this five-stage approach will help you choose where and when to invest and how to select and size the most appropriate equipment for your facility.

**Stage 1. Green Lights:** Lighting alone accounts for 20 to 40 percent of all energy use in commercial buildings. Fortunately, readily-available, proven technologies can reduce the amount of energy consumed by your lighting by 50 to 70 percent and also decrease glare, reduce maintenance costs, and provide a better working environment. Too much light or inefficient light also generates more heat, thus raising cooling costs.

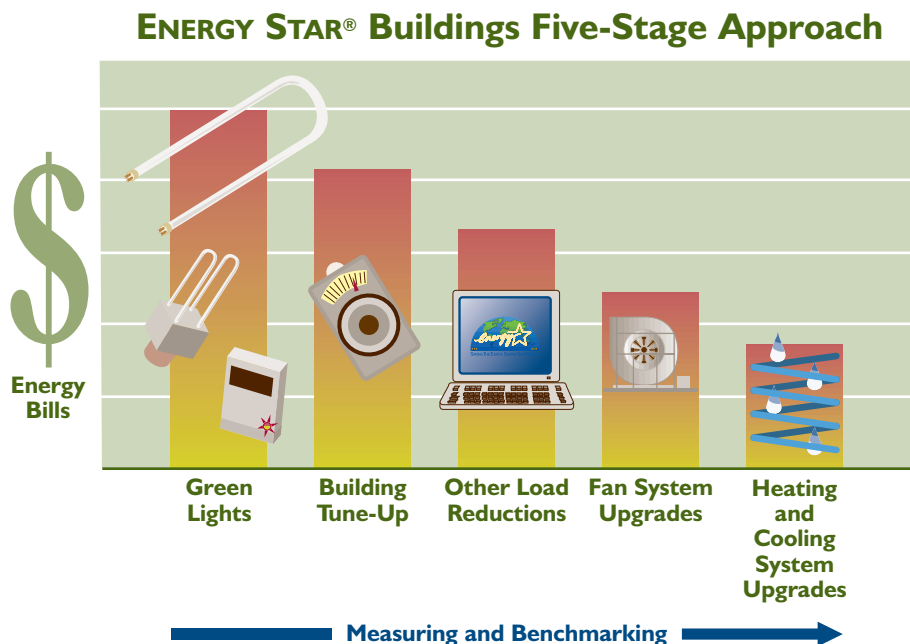
**Stage 2. Building Tune-up:** A building tune-up ensures that the equipment you have is maintained properly and is operating at design efficiency. Often, only simple adjustments to your existing equipment are needed. But the small adjustments made during this stage will have a dramatic effect on the scale and type of upgrades needed in later stages.

**Stage 3. Other Load Reductions:** Electrical devices such as computers, printers, vending machines and copiers use energy and generate heat, which increases the need for air conditioning in the summer. Drafts and excessive sun from poorly designed windows make occupants feel uncomfortable even when the room temperature is in the comfortable range. Using energy-efficient office equipment and building envelope technologies will reduce your building loads, thus lowering your electric, heating, and cooling bills and increasing occupant comfort.

**Stage 4. Fan System Upgrades:** Many buildings have over-sized fan systems. Under some conditions these fans circulate too much air — overcooling or overheating your space. As a result, they consume excess energy, raise your energy bills, reduce comfort, and generate unnecessary noise. Measuring how much fan power your facility needs before you upgrade your fan system is a low cost, high value investment.

**Stage 5. Heating and Cooling System Upgrades:** By implementing the first four stages of this approach, you will reduce the loads on your building and right-size your fan systems. As a result, you will need less air conditioning and heating. These systems are often

oversized to start with. Now, to really capitalize on the reductions you have made already, you need to measure the exact heating and cooling needs of your facility. For every dollar spent in measuring your needs, you will save \$10 to \$100 on new equipment. Armed with this information you can install the most efficient and appropriately sized heating and cooling systems for your building.



## Communicate Your Success

The third component of the ENERGY STAR Buildings strategy is to communicate your accomplishments — both internally and externally. There are two reasons to do this. First, communicating the benefits of successful upgrade projects will make it easier to do future projects — building momentum. Decision-makers and affected employees for example, will want to know the results of your projects. You can also benchmark your efforts against other organizations to gauge your results. Second, communicating your accomplishments is one of the benefits of success. Your employees, customers, shareholders, and the public are interested in your environmental leadership and financial success.

To learn more about the ENERGY STAR Buildings strategy or to become a partner, call the toll-free ENERGY STAR Hotline at 1-888-STAR-YES (1-888-782-7937) or visit us on the web at [www.epa.gov/buildings](http://www.epa.gov/buildings).

While helping you define and communicate your results, EPA will recognize your environmental leadership through publications, events, and awards. Moreover, ENERGY STAR Buildings allows you to network — share experience and information — with hundreds of other smart organizations that are improving their facilities. By communicating with others, you can gain valuable information on technologies, techniques, vendors, financing methods, and management ideas to improve your own operations.

## The Benefits of the ENERGY STAR Buildings Strategy

By employing the ENERGY STAR Buildings strategy, you will

- understand your organization's current and potential energy needs and how those needs translate into improved facility design
- learn the baseline energy needs of your facility
- understand the interaction between the building systems in your facility
- institute a logical, systematic procedure for conducting these upgrades and monitoring the performance of your building
- integrate and address environmental issues such as indoor air quality and the need to replace CFC-containing air conditioning equipment
- be better prepared to discuss deregulation issues with utilities and to negotiate with equipment and service vendors
- have a success story to tell — to employees, customers, shareholders, and the public.

The ENERGY STAR Buildings strategy, with its key activities, allows you to plan and implement your upgrades in an optimal manner. Your organization will reap the maximum benefits — both financially and in terms of comfort and productivity.



*“ENERGY STAR® Buildings has changed how we look at our business. As we reduce the cost of energy, we can pass some of those savings to our shareholders in the form of higher profits and to our customers in the form of lower prices.”*

— Thomas Stemberg  
Chief Executive Officer

**Staples, Inc.**

*“The ENERGY STAR Buildings strategy allows owners to make decisions that are both good for business and good for the environment through investment in high-efficiency, low-emission technologies while offering very attractive returns.”*

— James H. Schultz  
Executive Vice President  
Applied Global Systems

**The Trane  
Company**

*“ENERGY STAR Buildings is a grand-slam home run. The idea of reducing costs, improving conditions in facilities, minimizing pollution and gaining positive public recognition, all at a profitable return, is truly a win-win partnership.”*

— Kym Murphy  
Corporate Vice President,  
Environmental Policy

**The  
Walt Disney  
Company**

*“We have reduced costs without sacrificing jobs, by creating a comprehensive energy management plan through ENERGY STAR Buildings.”*

— George Miller  
Mayor

**City of  
Tucson**







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